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EXAMINER	
RUBIN, BLAKE J	

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2457	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/808,910	ARMSTRONG ET AL.	
	Examiner	Art Unit	
	BLAKE RUBIN	2457	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10,15-24,29-38 and 43-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10,15-24,29-38 and 43-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 December 2008* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to a request for continued examination filed December 18, 2008.

2. Claims 1-10, 15-24, 29-38, and 43-52 are pending in this application. Claims 1, 15 and 29 are currently amended. Claims 43-52 are newly presented. Claims 11-14, 25-28, and 39-42 have been previously cancelled.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-10, 15-24, 29-38, and 43-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teo et al (U.S. Patent No. 7,293,077, hereinafter Teo) in view of Bachmann et al (U.S. Patent Number 6,085,188, hereinafter Bachmann).

3. With respect to claim 1, Teo discloses a system comprising:

a first network device (column 6, lines 25-29) coupled to a first network (column 6, lines 20-24, *VLAN*), the first network coupled to a second network (column 2, lines 21-25, whereby the first network is mentioned above, and the second network is the internet), the first network device comprising device identity information and a source address of the first network device on the second network (column 11, lines 10-21); and

a directory server (column 3, lines 54-61; whereby the router contains a routing table, thereby making it capable of "registering controlling access to information about network devices coupled to a first network" as disclosed in the specification) coupled to a third network coupled to the second network (column 8, lines 38-49; column 1, lines 18-19; Figure 7, *configurable routers*; whereby the pair of root nodes form a third network for which the directory server is connected to, since each root node can be considered a network by itself), the directory server adapted to register the source address device identity information (column 7, lines 33-44, whereby the "routing table entries" contain and register the source address) and

Teo does not disclose parsing a query message.

However, Bachmann discloses said directory server further comprising:

a message processor (column 4, lines 45-47) for parsing a query message from a client to extract a network device source address and a query therefrom (column 4, lines 17-19), for processing said query to retrieve requested information to said client in reply to said query message (column 4, lines 17-19);

wherein said message processor determines if said device identity information satisfies said query (column 4, lines 17-19).

It would have been obvious to one skilled in the art at the time the invention was made to combine the network address translation of Teo with the directory services of Bachmanmn. The motivation to combine being, to increase the efficiency of the system by allowing the user to retrieve the topography of the network via a directory services database.

4. With respect to claim 2, the combination of Teo and Bachmann discloses the system of claim 1, Teo further discloses wherein the first network device comprises one of a computer, personal digital assistant, pager, cellular telephone, handheld messaging device, facsimile machine, copier, printer, telephone, security camera, household appliance, vending machine, kiosk, or digital camera (column 16, lines 41-46).

5. With respect to claim 3, the combination of Teo and Bachmann discloses the system of claim 1, , Teo further discloses wherein the first network device comprises one of an inkjet printer, laser printer, wide format printer, or dot matrix printer (column 16, lines 35-46).

6. With respect to claim 4, the combination of Teo and Bachmann discloses the system of claim 1, Teo further discloses wherein the first network device comprises an Internet protocol telephone (column 4, line 6; column 13, lines 24-25).

7. With respect to claim 5, the combination of Teo and Bachmann discloses the system of claim 1, Teo further discloses wherein the first network device comprises a network connection for coupling to the first network (column 5, lines 15-18; Figure 1).

8. With respect to claim 6, the combination of Teo and Bachmann discloses the system of claim 1, Teo further discloses wherein the first network comprises a local area

network (column 2, lines 52-59, whereby it is inherently known in the art that a private network is an implemented of a local area network; column 6, lines 20-24).

9. With respect to claim 7, the combination of Teo and Bachmann discloses the system of claim 1, Teo further discloses wherein the first network comprises a plurality of interconnected networks (column 2, lines 29-33).

10. With respect to claim 8, the combination of Teo and Bachmann discloses the system of claim 1, Teo further discloses wherein the second network comprises any of a wide area network, global network, public network, or the Internet (column 2, lines 21-24).

11. With respect to claim 9, the combination of Teo and Bachmann discloses the system of claim 1, Teo further discloses wherein the first network comprises a firewall, and the first network device is located within the firewall (column 15, lines 35-42).

12. With respect to claim 10, the combination of Teo and Bachmann discloses the system of claim 1, Teo further discloses wherein the first network comprises a firewall (column 15, lines 35-42), and the directory server is located outside the firewall.

13. With respect to claim 15, the combination of Teo and Bachmann discloses a system comprising:

first and second network devices (column 6, lines 25-29) coupled to a first network (column 6, lines 20-24, *VLAN*), the first network coupled to a second network (column 2, lines 21-25, whereby the first network is mentioned above, and the second network is the internet), the first network device comprising first device identity information and a first source address of the second network device on the second network (column 6, lines 35-47), the second network device comprising second device identity information and a second source address of the second network device on the second network (column 6, lines 35-47); and

a directory server (column 3, lines 54-61; whereby the router contains a routing table, thereby making it capable of "registering controlling access to information about network devices coupled to a first network" as disclosed in the specification) coupled to a third network coupled to the second network (column 8, lines 38-49; column 1, lines 18-19; Figure 7, *configurable routers*; whereby the pair of root nodes form a third network for which the directory server is connected to, since each root node can be considered a network by itself), the directory server adapted to register the first and second source address and device identity information (column 7, lines 33-44, whereby the "routing table entries" are contain, and register the source address),

Teo does not disclose parsing a query message.

However, Bachmann discloses said directory server further comprising:

a message processor (column 4, lines 45-47) for parsing a query message from a client to extract a network device source address and a query therefrom

(column 4, lines 17-19), for processing said query to retrieve requested information to said client in reply to said query message (column 4, lines 17-19);

wherein said message processor determines if said device identity information satisfies said query (column 4, lines 17-19).

It would have been obvious to one skilled in the art at the time the invention was made to combine the network address translation of Teo with the directory services of Bachmanmn. The motivation to combine being, to increase the efficiency of the system by allowing the user to retrieve the topography of the network via a directory services database.

14. With respect to claim 16, the combination of Teo and Bachmann discloses the system of claim 15, Teo further discloses wherein the first and second network devices each comprise one of a computer, personal digital assistant, pager, cellular telephone, handheld messaging device, facsimile machine, copier, printer, telephone, security camera, household appliance, vending machine, kiosk, or digital camera (column 16, lines 41-46).

15. With respect to claim 17, the combination of Teo and Bachmann discloses the system of claim 15, Teo further discloses wherein the first network device comprises a computer and the second network device comprises one of an inkjet printer, laser printer, wide format printer, or dot matrix printer (column 16, lines 35-46).

16. With respect to claim 18, the combination of Teo and Bachmann discloses the system of claim 15, wherein the first network device comprises a computer and the second network device comprises an Internet protocol telephone (column 4, line 6; column 13, lines 24-25).

17. With respect to claim 19, the combination of Teo and Bachmann discloses the system of claim 15, Teo further discloses wherein the first and second network devices each comprise a network connection for coupling to the first network (column 5, lines 15-18; Figure 1).

18. With respect to claim 20, the combination of Teo and Bachmann discloses the system of claim 15, Teo further discloses wherein the first network comprises a local area network (column 2, lines 52-59, whereby it is inherently known in the art that a private network is an implemented of a local area network; column 6, lines 20-24).

19. With respect to claim 21, the combination of Teo and Bachmann discloses the system of claim 15, Teo further discloses wherein the first network comprises a plurality of interconnected networks (column 2, lines 29-33).

20. With respect to claim 22, the combination of Teo and Bachmann discloses the system of claim 15, Teo further discloses wherein the second network comprises any of

a wide area network, global network, public network, or the Internet (column 2, lines 21-24).

21. With respect to claim 23, the combination of Teo and Bachmann discloses the system of claim 15, Teo further discloses wherein the first network comprises a firewall, and the first and second network devices are located within the firewall (column 15, lines 35-42).

22. With respect to claim 24, the combination of Teo and Bachmann discloses the system of claim 15, Teo further discloses wherein the first network comprises a firewall (column 15, lines 35-42), and the directory server is located outside the firewall.

23. With respect to claim 29, Teo discloses a system comprising:

first and second network devices (column 6, lines 25-29) coupled to a first network (VLAN, column 6, lines 20-24), the first network coupled to a second network (column 2, lines 21-25, whereby the first network is mentioned above, and the second network is the internet), the first network device comprising first device identity information and a first source address of the first network device on the second network (column 6, lines 35-47), the second computer device comprising second device identity information a second source address of the second network device on the second network (column 6, lines 35-47); and

a directory server (column 3, lines 54-61; whereby the router contains a routing table, thereby making it capable of "registering controlling access to information about network devices coupled to a first network" as disclosed in the specification) coupled to a third network couple to the second network (column 8, lines 38-49; column 1, lines 18-19; Figure 7, *configurable routers*; whereby the pair of root nodes form a third network for which the directory server is connected to, since each root node can be considered a network by itself), the directory server adapted to register the first and second source addresses (column 7, lines 33-44, whereby the "routing table entries" are contain, and register the source address), and adapted to process requests for source addresses about registered network devices and device identity information (column 10, lines 53-65).

Teo does not disclose parsing a query message.

However, Bachmann discloses said directory server further comprising:

a message processor (column 4, lines 45-47) for parsing a query message from a client to extract a network device source address and a query therefrom (column 4, lines 17-19), for processing said query to retrieve requested information to said client in reply to said query message (column 4, lines 17-19);

wherein said message processor determines if said device identity information satisfies said query (column 4, lines 17-19).

It would have been obvious to one skilled in the art at the time the invention was made to combine the network address translation of Teo with the directory services of Bachmanmn. The motivation to combine being, to increase the efficiency of the system

by allowing the user to retrieve the topography of the network via a directory services database.

24. With respect to claim 30, the combination of Teo and Bachmann discloses the system of claim 29, Teo further discloses wherein the first and second network devices each comprise one of a computer, personal digital assistant, pager, cellular telephone, handheld messaging device, facsimile machine, copier, printer, telephone, security camera, household appliance, vending machine, kiosk, or digital camera (column 16, lines 41-46).

25. With respect to claim 31, the combination of Teo and Bachmann discloses the system of claim 29, Teo further discloses wherein the first network device comprises a computer and the second network device comprises one of an inkjet printer, laser printer, wide format printer, or dot matrix printer (column 16, lines 35-46).

26. With respect to claim 32, the combination of Teo and Bachmann discloses the system of claim 29, Teo further discloses wherein the first network device comprises a computer (column 16, lines 41-46) and the second network device comprises an Internet protocol telephone (column 4, line 6; column 13, lines 24-25).

27. With respect to claim 33, the combination of Teo and Bachmann discloses the system of claim 29, Teo further discloses wherein the first and second network devices

each comprise a network connection for coupling to the first network (column 5, lines 15-18; Figure 1).

28. With respect to claim 34, the combination of Teo and Bachmann discloses the system of claim 29, Teo further discloses wherein the first network comprises a local area network (column 2, lines 52-59, whereby it is inherently known in the art that a private network is an implemented of a local area network; column 6, lines 20-24).

29. With respect to claim 35, the combination of Teo and Bachmann discloses the system of claim 29, Teo further discloses wherein the first network comprises a plurality of interconnected networks (column 2, lines 29-33).

30. With respect to claim 36, the combination of Teo and Bachmann discloses the system of claim 29, Teo further discloses wherein the second network comprises any of a wide area network, global network, public network, or the Internet (column 2, lines 21-24).

31. With respect to claim 37, the combination of Teo and Bachmann discloses the system of claim 29, Teo further discloses wherein the first network comprises a firewall, and the first and second network devices are located within the firewall (column 15, lines 35-42).

32. With respect to claim 38, the combination of Teo and Bachmann discloses the system of claim 29, Teo further discloses wherein the first network comprises a firewall, and the directory server is located outside the firewall (column 15, lines 35-42).

33. With respect to claim 43, Teo discloses a directory server apparatus (column 3, lines 54-61; whereby the router contains a routing table, thereby making it capable of "registering controlling access to information about network devices coupled to a first network" as disclosed in the specification) for use in a system that includes multiple first networks (column 6, lines 20-24, *VLAN*) interconnected via a second network (column 2, lines 21-25, whereby the first network is mentioned above, and the second network is the internet), where each of the first networks are linked to one or more network devices each having assigned thereto a source address on the respective first network and device identity information (column 11, lines 10-21), where the directory server is linked directly or indirectly to the second network (column 2, lines 21-25) and comprises:

a directory table (column 7, lines 33-44) containing a listing of the network devices and prescribed data associated with each listed network device, the prescribed data including the source address and device identity information assigned to the listed network device (column 7, lines 33-44, whereby the "routing table entries" contain and register the source address);

a message processor programmed to perform operations including:

responsive to receiving network devices' assigned source addresses and device identity information, registering said received addresses and information in the directory table (column 7, lines 52-60);

Teo does not disclose parsing a query message.

However, Bachmann discloses:

responsive to receiving a query message via the second network from a requesting network device coupled to one of the first networks (column 4, lines 17-19), parsing the query message to extract a source address of the requesting network device and a query seeking network devices satisfying stated criteria (column 4, lines 17-19), accessing the directory table to identify any listed devices satisfying the criteria (column 4, lines 17-19), and sending the requesting network device an identification of any network devices satisfying the criteria in reply to said query message (column 4, lines 17-19).

It would have been obvious to one skilled in the art at the time the invention was made to combine the network address translation of Teo with the directory services of Bachmanmn. The motivation to combine being, to increase the efficiency of the system by allowing the user to retrieve the topography of the network via a directory services database.

34. With respect to claim 44, the combination of Teo and Bachmann the apparatus of claim 43, Bachmann further discloses where if the query seeks network devices linked to the same network as the requesting network device, the message processor requires

that network devices resulting from the query must be linked to the same network as the requesting network device (column 5, lines 2-9).

35. With respect to claim 45, the combination of Teo and Bachmann the apparatus of claim 43, Teo further discloses

where a router couples a given one of the first networks to the second network, and the router uses multiple addresses on the second network for routing messages from network devices on the given network via the second network (column 6, lines 43-47);

where the directory table further includes a cross-map associating each of the multiple addresses on the second network with the first network (column 7, lines 33-39);

where the message processor is further programmed, if the query seeks network devices linked to the same network as the requesting network device, to utilize the cross-map to require that network devices resulting from the query must be linked to the same network as the requesting network device (column 10, lines 53-65).

36. With respect to claim 46, the combination of Teo and Bachmann the apparatus of claim 43, Teo further discloses where the device identity information listed in the directory table includes device type (column 17, lines 8-17).

37. With respect to claim 47, the combination of Teo and Bachmann the apparatus of claim 43, Teo further discloses where the device identity information listed in the directory table includes device name (column 9, lines 51-55, *unique LLI*).

38. With respect to claim 48, the combination of Teo and Bachmann the apparatus of claim 43, Teo further discloses where the device identity information listed in the directory table includes each of the following for a given network device: device type (column 17, lines 8-17), device name (column 9, lines 51-55, *unique LLI*), location within a building (column 7, lines 18-20), geographic location (column 7, lines 18-20), telephone number of the network device (column 13, lines 21-25), prescribed access rights to the network device (column 15, lines 36-43), performance characteristics of the network device (column 3, lines 1-12), classes of users or network devices to which the network device is available or unavailable (column 15, lines 36-43).

39. With respect to claim 49, the combination of Teo and Bachmann the apparatus of claim 43, Teo further discloses where the source address includes an internal address of a network device on one of the first networks (column 7, lines 3-12).

40. With respect to claim 50, the combination of Teo and Bachmann the apparatus of claim 43, Teo further discloses where a router couples a given one of the first networks to the second network, and the router uses multiple addresses on the second network for routing messages from network devices on the given network via the second

network, and where the source addresses of network devices on the given network constitute the addresses on the second network (column 6, lines 43-47).

41. With respect to claim 51, the combination of Teo and Bachmann the apparatus of claim 43, Teo further discloses comprising one or more of the network devices (column 6, lines 36-39).

42. With respect to claim 52, Teo discloses a computer program product storing a computer executable program for operating a directory server apparatus (column 3, lines 54-61; whereby the router contains a routing table, thereby making it capable of "registering controlling access to information about network devices coupled to a first network" as disclosed in the specification) in a system that includes multiple first networks (column 6, lines 20-24, *VLAN*) interconnected via a second network (column 2, lines 21-25, whereby the first network is mentioned above, and the second network is the internet), where each of the first networks are linked to one or more network devices each having assigned thereto a source address on the respective first network and device identity information (column 11, lines 10-21), where the directory server apparatus is linked directly or indirectly to the second network (column 2, lines 21-25), the computer executable program comprising operations of:

providing a directory table (column 7, lines 33-44) containing a listing of the network devices and prescribed data associated with each listed network device, the prescribed data including the source address and device identity information assigned

to the listed network device (column 7, lines 33-44, whereby the "routing table entries" contain and register the source address);

causing a message processor to perform operations including:

responsive to receiving network devices' assigned source addresses and device identity information, registering said received addresses and information in the directory table (column 7, lines 52-60);

Teo does not disclose parsing a query message.

However, Bachmann discloses said directory server further comprising:

responsive to receiving a query message via the second network from a requesting network device coupled to one of the first networks, parsing the query message to extract a source address of the requesting network device and a query seeking network devices satisfying stated criteria (column 4, lines 17-19), accessing the directory table to identify any listed devices satisfying the criteria (column 4, lines 17-19), and sending the requesting network device an identification of any network devices satisfying the criteria in reply to said query message (column 4, lines 17-19).

It would have been obvious to one skilled in the art at the time the invention was made to combine the network address translation of Teo with the directory services of Bachmanmn. The motivation to combine being, to increase the efficiency of the system by allowing the user to retrieve the topography of the network via a directory services database.

Response to Arguments

43. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

44. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BLAKE RUBIN whose telephone number is (571) 270-3802. The examiner can normally be reached on M-R: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rubin Blake/
Examiner, Art Unit 2457

/ARIO ETIENNE/

Supervisory Patent Examiner, Art Unit 2457